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August 03, 2010

ANALYTICAL TEST RESULTS

Raymond Siegener
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
TEL: (781) 721-4098
FAX: (781) 721-4073

Subject: 09382-2 Canton Airport

Workorder No.: 1007079

Dear Raymond Siegener:

AMRO Environmental Laboratories Corp. received 2 samples on 7/23/2010 for the analyses presented in the following report.

AMRO is accredited in accordance with NELAC and certifies that these test results meet all the requirements of NELAC, where applicable, unless otherwise noted in the case narrative.

The enclosed Sample Receipt Checklist details the condition of your sample(s) upon receipt. Please be advised that any unused sample volume and sample extracts will be stored for a period of 60 days from sample receipt date (90 days for samples from New York). After this time, AMRO will properly dispose of the remaining sample(s). If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This report consists of a total of 12 pages. This letter is an integral part of your data report. All results in this project relate only to the sample(s) as received by the laboratory and documented in the Chain-of-Custody. This report shall not be reproduced except in full, without the written approval of the laboratory. If you have any questions regarding this project in the future, please refer to the Workorder Number above.

Sincerely,

Nancy Stewart
Vice President

State Certifications: NH (NELAC): 1001, MA: M-NH012, CT: PH-0758, NY: 11278 (NELAC), ME: NH012 and 1001.

Hard copy of the State Certification is available upon request.

AMRO Environmental Laboratories Corp.

Date: 03-Aug-10

CLIENT: GEI Consultants, Inc.
Project: 09382-2 Canton Airport
Lab Order: 1007079
Date Received: 7/23/2010

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date	Collection Time
1007079-01A	093822-LOC33-Shingles-Soil	7/22/2010	8:42 AM
1007079-02A	093822-LOC33-Soil-1	7/22/2010	8:44 AM

AMRO Environmental Laboratories Corp.

03-Aug-10

Lab Order: 1007079

Client: GEI Consultants, Inc.

Project: 09382-2 Canton Airport

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name	Prep Date	Batch ID	Analysis Date	TCLP Date
1007079-01A	093822-LOC33-Shingles-Soi	7/22/2010 8:42:00 AM	Soil	EPA 8082 PCBS IN SOIL/SOLIDS	7/27/2010	20469	7/30/2010	
				EPA 3540C SOPREP SOXHLET: PCBS				
				Percent Moisture			7/28/2010	
							R45093	
1007079-02A	093822-LOC33-Soil-1	7/22/2010 8:44:00 AM		EPA 8082 PCBS IN SOIL/SOLIDS	7/27/2010	20469	7/29/2010	
				EPA 3540C SOPREP SOXHLET: PCBS				
				Percent Moisture			7/28/2010	
							R45093	

Chain-of-Custody Record

Laboratory:

Laboratory Job #



GEI
Consultants

400 Unicorn Park Drive
Woburn, MA 01801
PH: 781.721.4000
FX: 781.721.4073

Project Name: Canton Airport

Project Number: 09382-2

Send Report to: rsiegener@geiconsultants.com

Send EDD to: labdata@geiconsultants.com

Project Location: Canton, MA

Project Manager: Anne Leifer

Page 1 of 1

MCP PRESUMPTIVE CERTAINTY REQUIRED		YES	NO
1	1		
2	2		
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100	100		


If Yes, Are MCP Analytical Methods Required?

If Yes, Are Drinking Water Samples Submitted?

If Yes, Have You Met Minimum Field QC Requirements?

[illegible][illegible]

MCP Level Needed: GEI requires the most stringent Method 1 MCP standard be met for all analytes whenever possible.

Relinquished by: (signature)	Date:	Time:	Received by: (signature)
1. 	7/22/10	1700	1. G.E. Sample Fridge
2. G.E. Sample Fridge	7/23/10	1035	2. Maura MacLeod
3. Maura MacLeod	7/23/10	1040	3. H. Laveau
4. H. Laveau	7/23/10	1130	4. Kaleigh Wallace

SAMPLE RECEIPT CHECKLIST

Client: <u>GFI</u> Project Name: <u>Canton Airport</u> Ship via: (circle one) Fed Ex., UPS <u>AMRO Courier</u> Hand Del., Other Courier, Other:	AMRO ID: <u>1007079</u> Date Rec.: <u>7/23/10</u> Date Due: <u>7/30/10</u>
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Items to be Checked Upon Receipt	Yes	No	NA	Comments
1. Army Samples received in individual plastic bags?			✓	
2. Custody Seals present?			✓	
3. Custody Seals Intact?			✓	
4. Air Bill included in folder if received?			✓	
5. Is COC included with samples?	✓			
6. Is COC signed and dated by client?	✓			
7. Laboratory receipt temperature. TEMP = <u>6°</u> Samples rec. with ice <input checked="" type="checkbox"/> ice packs <input type="checkbox"/> neither <input type="checkbox"/>				
8. Were samples received the same day they were sampled? Is client temperature = or <6°C ? If no obtain authorization from the client for the analyses. Client authorization from: _____ Date: _____ Obtained by: _____	✓	✓		
9. Is the COC filled out correctly and completely?	✓			
10. Does the info on the COC match the samples?	✓			
11. Were samples rec. within holding time?	✓			
12. Were all samples properly labeled?	✓			
13. Were all samples properly preserved?			✓	
14. Were proper sample containers used?	✓			
15. Were all samples received intact? (none broken or leaking)	✓			
16. Were VOA vials rec. with no air bubbles?			✓	
17. Were the sample volumes sufficient for requested analysis?	✓			
18. Were all samples received?	✓			
19. VPH and VOA Soils only: Sampling Method VPH (circle one): M=Methanol, E=EnCore (air-tight container) Sampling Method VOA (circle one): M=Methanol, SB=Sodium Bisulfate, E=EnCore, B=Bulk If M or SB: Does preservative cover the soil? If NO then client must be faxed. Does preservation level come close to the fill line on the vial? If NO then client must be faxed. Were vials provided by AMRO? If NO then weights MUST be obtained from client Was dry weight aliquot provided? If NO then fax client and inform the VOA lab ASAP.			✓	
20. Subcontracted Samples: What samples sent: Where sent: Date: Analysis: TAT:			✓	
21. Information entered into: Internal Tracking Log? Dry Weight Log? Client Log? Composite Log? Filtration Log?	✓ ✓ ✓ ✓			

Received By: <u>KW</u>	Date: <u>7/23/10</u>	Logged in By: <u>KW</u>	Date: <u>7/26/10</u>
Labeled By: <u>KW</u>	Date: <u>7/26/10</u>	Checked By: <u>SK</u>	Date: <u>7/27/10</u>

CLIENT: GEI Consultants, Inc.
Project: 09382-2 Canton Airport
Lab Order: 1007079

CASE NARRATIVE

PCBs:

1. Sample 093822-LOC33-Shingles-Soil-2 (1007079-01): The peaks match Aroclor 1268 however the ratios are not a good match.
2. The surrogates, Tetrachloro-m-xylene and Decachlorobiphenyl , were diluted out in sample; LOC33-SOIL-1 (1007079-02). The reporting limit is high due to the dilution.
3. The surrogate, Decachlorobiphenyl ,was high outside the control limits in sample; LOC33-Shingles-SOIL-2 (1007079-01), due to sample matrix interference.

MassDEP Analytical Protocol Certification Form

Laboratory Name: AMRO Environmental Lab. Corp.

Project #: 09382-2

Project Location: Canton Airport

RTN:

This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):

1007079-01, 02

Matrices: Groundwater/Surface Water ~~Soil/Sediment~~ Drinking Water Air Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A	7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A <input checked="" type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="radio"/> Yes <input type="radio"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="radio"/> Yes <input type="radio"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="radio"/> Yes <input type="radio"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="radio"/> Yes <input type="radio"/> No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="radio"/> Yes <input type="radio"/> No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes <input checked="" type="radio"/> No ¹
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Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes <input checked="" type="radio"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input checked="" type="radio"/> Yes <input type="radio"/> No ¹

¹All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Nancy Stewart

Position: Vice President

Printed Name: Nancy Stewart

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Date: 8-10-10

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Micro Data Qualifiers

TNTC	Too numerous to count
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Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
*	Duplicate analysis not within control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
#	See Case Narrative

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

AMRO Environmental Laboratories Corp.

Date: 03-Aug-10

 CLIENT: GEI Consultants, Inc.
 Project: 09382-2 Canton Airport

Lab Order: 1007079

Lab ID: 1007079-01

Collection Date: 7/22/2010 8:42:00 AM

Collection Time:

Client Sample ID: 093822-LOC33-Shingles-Soil-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCBS BY EPA8082
SW8082

Analyst: KA

Aroclor 1016	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1221	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1232	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1242	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1248	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1254	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1260	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1262	ND	120		µg/Kg-dry	1	7/30/2010 2:25:00 PM
Aroclor 1268	610	120	#	µg/Kg-dry	1	7/30/2010 2:25:00 PM
Surr: Tetrachloro-m-xylene	84.7	30-150		%REC	1	7/30/2010 2:25:00 PM
Surr: Decachlorobiphenyl	2,710	30-150	SE	%REC	1	7/30/2010 2:25:00 PM

Lab ID: 1007079-02

Collection Date: 7/22/2010 8:44:00 AM

Collection Time:

Client Sample ID: 093822-LOC33-Soil-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCBS BY EPA8082
SW8082

Analyst: KA

Aroclor 1016	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1221	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1232	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1242	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1248	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1254	690,000	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1260	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1262	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Aroclor 1268	ND	66,000		µg/Kg-dry	1000	7/29/2010 6:29:00 AM
Surr: Tetrachloro-m-xylene	0	30-150	S	%REC	1000	7/29/2010 6:29:00 AM
Surr: Decachlorobiphenyl	0	30-150	S	%REC	1000	7/29/2010 6:29:00 AM

AMRO Environmental Laboratories Corp.

Date: 03-Aug-10

CLIENT: GEI Consultants, Inc.

Work Order: 1007079

Project: 09382-2 Canton Airport

QC SUMMARY REPORT

Method Blank

Sample ID: MB-20469	Batch ID: 20469	Test Code: SW8082	Units: µg/Kg	Analysis Date 7/28/2010 12:08:00 PM	Prep Date: 7/27/2010						
Client ID:		Run ID: GC-ELVIS_100728A		SeqNo: 749464							
Analyte	QC Sample Result	RL	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua

Atrodor 1016	ND	50	µg/Kg								
Atrodor 1221	ND	50	µg/Kg								
Atrodor 1232	ND	50	µg/Kg								
Atrodor 1242	ND	50	µg/Kg								
Atrodor 1248	ND	50	µg/Kg								
Atrodor 1254	ND	50	µg/Kg								
Atrodor 1260	ND	50	µg/Kg								
Atrodor 1262	ND	50	µg/Kg								
Atrodor 1268	ND	50	µg/Kg								
Surr: Tetrachloro-m-xylene	16.41	0	µg/Kg	16	0	103	30	150	0		
Surr: Decachlorobiphenyl	17.29	0	µg/Kg	16	0	108	30	150	0		

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 03-Aug-10

CLIENT: GEI Consultants, Inc.

Work Order: 1007079

Project: 09382-2 Canton Airport

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-20469	Batch ID: 20469	Test Code: SW8082	Units: µg/Kg	Analysis Date: 7/28/2010 1:27:00 PM	Prep Date: 7/27/2010
Client ID:		Run ID: GC-ELVIS_100728A		SeqNo: 749467	

Analyte	QC Sample Result	RL	QC Spike Amount	Units	QC Spike Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qual
Aroclor 1016	1013	50	1000	µg/Kg	0	101	70.9	125	0			
Aroclor 1260	1093	50	1000	µg/Kg	0	109	60.1	126	0			
Surr: Tetrachloro-m-xylene	17.46	0	16	µg/Kg	0	109	30	150	0			
Surr: Decachlorobiphenyl	19.11	0	16	µg/Kg	0	119	30	150	0			

Sample ID: LCS-20469	Batch ID: 20469	Test Code: SW8082	Units: µg/Kg	Analysis Date: 7/28/2010 1:54:00 PM	Prep Date: 7/27/2010
Client ID:		Run ID: GC-ELVIS_100728A		SeqNo: 749468	

Analyte	QC Sample Result	RL	QC Spike Amount	Units	QC Spike Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qual
Aroclor 1016	906.6	50	1000	µg/Kg	0	90.7	70.9	125	1013	11.1	50	
Aroclor 1260	1018	50	1000	µg/Kg	0	102	60.1	126	1093	7.03	50	
Surr: Tetrachloro-m-xylene	14.54	0	16	µg/Kg	0	90.9	30	150	0	0	0	
Surr: Decachlorobiphenyl	17.59	0	16	µg/Kg	0	110	30	150	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 03-Aug-10

CLIENT: GEI Consultants, Inc.
Project: 09382-2 Canton Airport

Lab Order: 1007079

Lab ID: 1007079-01

Collection Date: 7/22/2010 8:42:00 AM

Collection Time:

Client Sample ID: 093822-LOC33-Shingles-Soil-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PERCENT MOISTURE

D2216

Analyst: NS

Percent Moisture	18.7	0		wt%	1	7/28/2010
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Lab ID: 1007079-02

Collection Date: 7/22/2010 8:44:00 AM

Collection Time:

Client Sample ID: 093822-LOC33-Soil-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PERCENT MOISTURE

D2216

Analyst: NS

Percent Moisture	24.3	0		wt%	1	7/28/2010
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